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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,282	10/25/2005	Alain Lecompte	0510-1126	2996

466 7590 11/19/2007  
YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER
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IBRAHIM, MEDINA AHMED

ART UNIT	PAPER NUMBER
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1638

MAIL DATE	DELIVERY MODE
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11/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/554,282

Applicant(s)

LECOMPTE, ALAIN

Examiner

Medina A. Ibrahim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-12 are pending and are examined.

#### ***Copending Applications***

Applicants must bring to the attention of the Examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other copending United States applications, which are "material to patentability" of the application in question. MPEP 2001.06(b). See *Dayco Products Inc. v. Total Containment Inc.*, 66 USPQ2d 1801 (CA FC 2003).

#### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Objections***

In all claims that recite, "characterized in that", it is suggested that the phrase be replaced with ---comprises--- or --comprising-- accordingly, for USA format. For example, in claim 1, "characterized in that it-- should be deleted. Also, in claim 1, step (f), it is suggested that "pricking out" is replaced with ---transferring---.

In all claims that recite, "characterized in that", or "pricking out", it is suggested that the claims be amended as above.

At claims 8-11, it is suggested that "Recombinant plants" be replaced with ---A recombinant plant", for clarification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite for lacking correlation between the preamble and the last method step. The preamble recites obtaining "a recombinant plant" and in the last method step "recombinant young plants" are obtained. Clarification is required to more clearly define the metes and bounds of the claim.

Claim 2 is indefinite because "the resulting young chicories" lacks antecedent basis in claim 1.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required

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feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation fungal infection, and the claim also recites particularly by *Erwinia carotovora*, by *Sclerotinia Sclerotiorum*, or even by *Phytophthora cryptogea*, which is the narrower statement of the range/limitation.

Claim 5 is indefinite because "the resulting young recombinant chicories" lacks antecedent basis in claim 4.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delesalle et al ( US 6,803,497 B1) in view of Sidikou-Seyni et al (Plant Cell Tissue and Organ Culture (1992), vol. 29:83-91) and Castano et al (Scientia Horticulture (1997), vol. 72, pp. 1-9).

The Claims are drawn to a method for obtaining a recombinant Cichorium plant; the method comprising cross-breeding a batch of female plants of a variety of the Cichorium intybus L species with a batch of male plants of a variety of the Cichorium endivia L species and obtaining a F1 generation hybrid plant population; performing a self-fertilization of the F1 generation hybrid plants to obtain F2 generation recombinant plants; selecting F2 generation recombinant plants, wherein the buds or the roots thereof do not have any visible alterations caused by a viral, bacterial or fungal infection caused by Erwinia carotovora, by Sclerotinia Sclerotiorum, or by Phytophthora cryptogea; forcing the selected F2 generation recombinant plants for 10 to 18 days under the conditions of a nutriment solution temperature from 15°C to 17°C; and room temperature from 15 to 17°C to obtain regenerated buds; and pricking out regenerated buds on an appropriate culture medium to obtain recombinant young plants. The claims are also drawn to said method wherein the recombinant young chicories are selected according to the phenotypes listed in claim 2; said method further comprising self-fertilizing F2 recombining plants to obtain F3 generation recombining plants through cultivating in the ground; forcing F3 generation for 10 to 18 days under nutriment solution and room temperature of 15°C to 17°C to obtain F4 generation recombinant

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young plants. The claims are further drawn a recombinant plant produced by said methods, wherein the plant has specified phenotypes.

Delesalle et al ( US 6,803,497 B1) teach a method of producing recombinant chicory plants by crossing two chicory plant species (see claims 9 and 10). The chicory plant cultivars used in the method are from *Cichorium intybus* and *Cichorium endivia*. Delesalle et al also teach culturing and regenerating recombinant chicory plants and also teach the importance of chicory plants in Agricultural food industry (see the whole document).

Delesalle et al do not teach cross breeding *Cichorium intybus* with *Cichorium endivia* to produce *Cichorium* hybrids.

Sidikou-Seyni et al *Cichorium* hybrids designated as chicory "474" produced by crossing *Cichorium intybus* and *Cichorium endivia* and methods of regenerating somatic embryos and adult plants by culturing mesophyll protoplasts of the embryogenic clone chicory "474" in culture medium under specified growing conditions. Sidikou-Seyni et al also teach F1 hybrid plants that are phenotypically normal and fertile (see plant regeneration methods on page 89 and discussion on page 90).

Castano et al teach five chicory hybrid plants from different cultivars and cross/self pollination of said chicory plants and self incompatibility/compatibility reaction study (self pollination, intra-pollination and cross pollination) of said cultivars for production of commercial chicory hybrids, and hybrid plants with viable seeds. Castano et al also teach the use of F1 chicory hybrid plants for commercial production in the field and in hydroponic forcing. Castano et al also teach that Chicory is an important

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economic plant for its as a vegetable and as an industrial raw material the importance of chicories in agricultural food industry (see the whole document).

Therefore, it would have been obvious to one of ordinary skill in the art to use the method of producing a recombinant Cichorium plant as taught by Delesalle et al, and to modify that method by incorporating the Cichorium hybrids produced by crossing *Cichorium intybus* and *Cichorium endivia* as taught Sidikou-Seyni et al, to produce recombinant Cichorium hybrid plants having a desired phenotype with a reasonable expectation of success, given that chicory hybrid plants and their compatibility reactions are already known in the prior art as shown by Castano et al. One would have been motivated to produce recombinant chicory hybrids given that Chicory is an important economic plant for its as a vegetable and as an industrial raw material the importance of chicories in agricultural food industry as taught by Castano et al. Depending upon the specific cultivar employed and the culture conditions, recombinant chicory hybrids having specific phenotypes such as those listed in the can be produced with a reasonable expectation of success as taught by each of Delesalle et al and Sidikou-Seyni et al. Therefore, the invention as whole was a prima facie obvious.

### **Remarks**

No claim is allowed.

### **Contact information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM. Before and after final



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responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at (571) 272-0975.

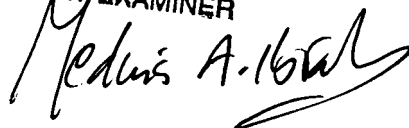
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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

11/12/07

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MEDINA A. IBRAHIM  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Medina A. Ibrahim", written over the printed name and title.